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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/585,762	06/02/2000	Dirk Van Hying	5019	5865

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MILLIKEN & COMPANY  
PO BOX 1926  
SPARTANBURG, SC 29303

EXAMINER

WACHTEL, ALEXIS A

ART UNIT PAPER NUMBER

1764

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/585,762

Applicant(s)

HYNING, DIRK VAN

Examiner

Alexis Wachtel

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-22 and 24-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-22 and 24-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Detailed Action***

***Response to Amendment***

1. Applicant's amendment and accompanying Remarks filed 8-9-05 have been entered and carefully considered.

The amendment is sufficient to overcome the obviousness rejections of claims 17-22 and 24-32 since the previously applied prior art fails to teach the use of the claimed binder material as now claimed. However, an updated search yielded new prior art that provides a new basis of rejection as shown below. Applicant's arguments are rendered moot in view of the new grounds of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17-22,24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,981,063 to Yokozeki et al and US 6,149,927 to Ghosh.

With respect to claim 17, Yokozeki et al teach a treated substrate comprising:  
a finish comprising a) solid compounds selected from the group consisting of metal particles, metal salts, metal oxides, and any combinations thereof (Col 2, lines 40-43);(Col 3, lines 1-13), and b) at least one binder material (Col 3, line 45), wherein said binder material, after processing and application to said substrate, is not readily water soluble, is not susceptible to attack by a standard laundering additive selected from the

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group consisting of detergents, solvents, bleaches, or mixtures thereof, and is not susceptible to degradation due to exposure to high temperatures associated with standard laundry drying temperatures', a substrate selected from the group consisting of a yarn, a fabric comprised of individual fibers, and a film, and having at least one surface thereof', wherein said finish is adhered to at least one portion of said surface of said substrate.

Yokezeki et al and Ghosh do not teach that the claimed binder material is selected from the group consisting of melamine formaldehyde resins, acrylic resins, permanent press resins, pvc/vinyl chloride copolymers, ethoxylated polyester, and mixtures thereof. Ghosh is directed to biocidal compositions (Abstract) and teaches that nets (Col 7, lines 5-7) can be used in conjunction with a biocide and binder. In particular, Ghosh identifies conventional binders suitable for binding a biocidal composition to a fiber net as polyvinyl chloride and acrylic resins (Col 7, lines 18-28). Since both Ghosh and Yokezeki et al recognize the utility of employing a binder for the purpose of affixing a biocidal composition to a fiber substrate, it would have been obvious to one of ordinary skill to have used a binder made of pvc or acrylic resin with the biocide composition disclosed by Yokezeki et al.

With respect to claim 17, although Yokezeki et al and Ghosh do not explicitly teach that at least one portion of said treated substrate retains at least 30% of said finish after 10 washes as performed in accordance with the wash procedure of MTCC Test Method 130-1981, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar

materials (i.e. a substrate coated with a metal ion generating compound and binder) and in the similar production steps (i.e. a substrate, a metal ion generating compound, and binder) used to produce the treated substrate. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594.

With respect to claim 18,24,27: wherein said substrate is an individual yarn (Yokozeki et al, Col 3, line 45).

With respect to claim 19,25,28: wherein said substrate is a textile fabric (Yokozeki et al, Col 1, line 60).

With respect to claim 20,26,29: wherein said finish comprises silver particles (Yokozeki et al, Col 2, lines 40-43);(Yokozeki et al, Col 3, lines 1-13).

With respect to claim 21 and 22: wherein said treatment is integrally retained in an amount of at least 30% after 20 washes.

With respect to claims 21 and 22, although Yokozeki et al does not explicitly teach that at least one portion of said treated substrate retains at least 30% of said finish after 20 washes, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. a substrate coated with a metal ion generating compound and binder) and in the similar production steps (i.e. a substrate, a metal ion generating compound, and binder) used to produce the treated substrate. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594.

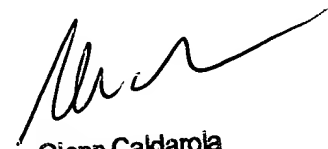
With respect to claims 30-32, although Yokozeki et al does not explicitly teach that at least one portion of said treated substrate, it is reasonable to presume that said

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limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. a substrate coated with a metal ion generating compound and binder) and in the similar production steps (i.e. a substrate, a metal ion generating compound, and binder) used to produce the treated substrate. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594.

### **Conclusion**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Wachtel whose telephone number is 571-272-1455. The examiner can normally be reached on 10:30am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Glenn Caldarola, can be reached at (571)-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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